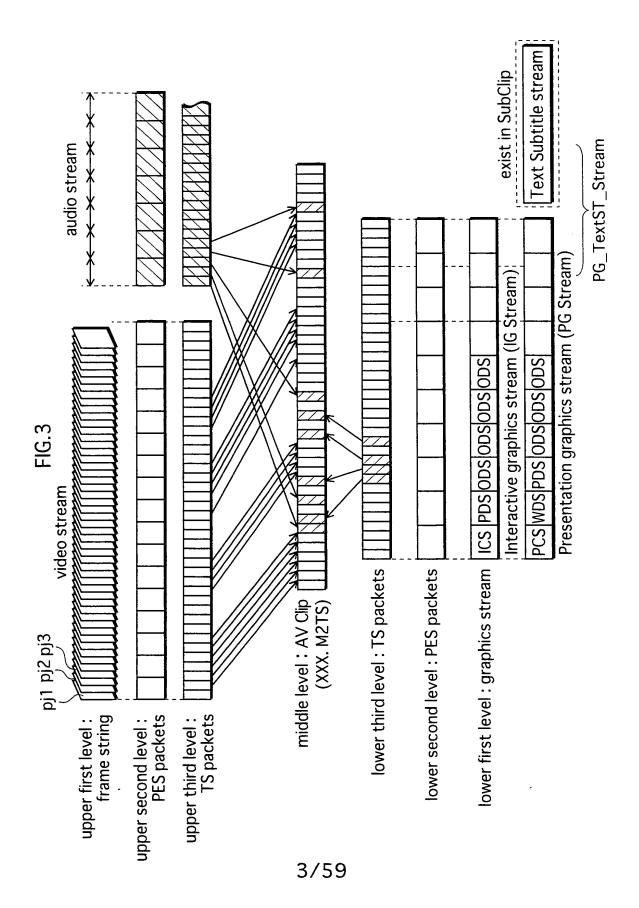
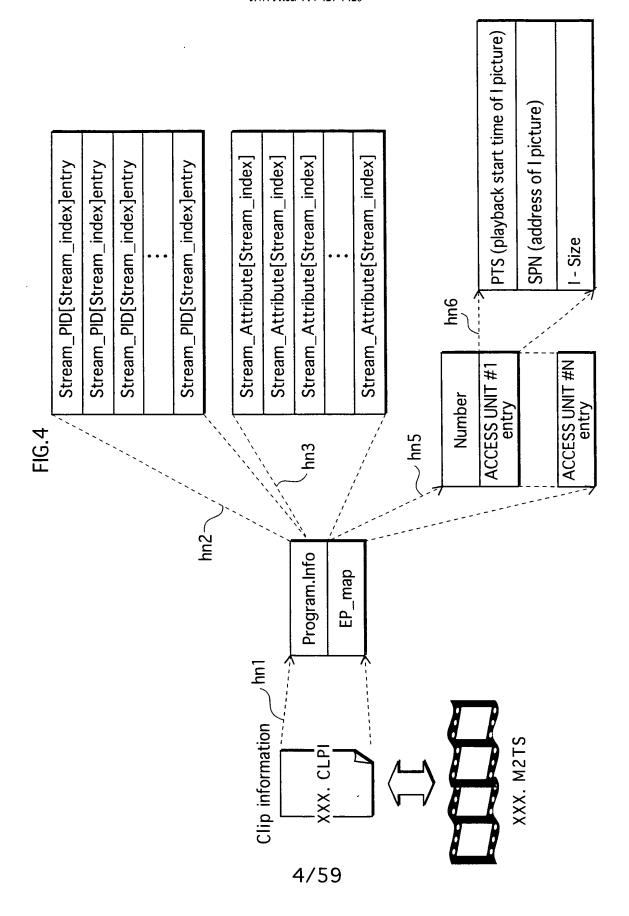
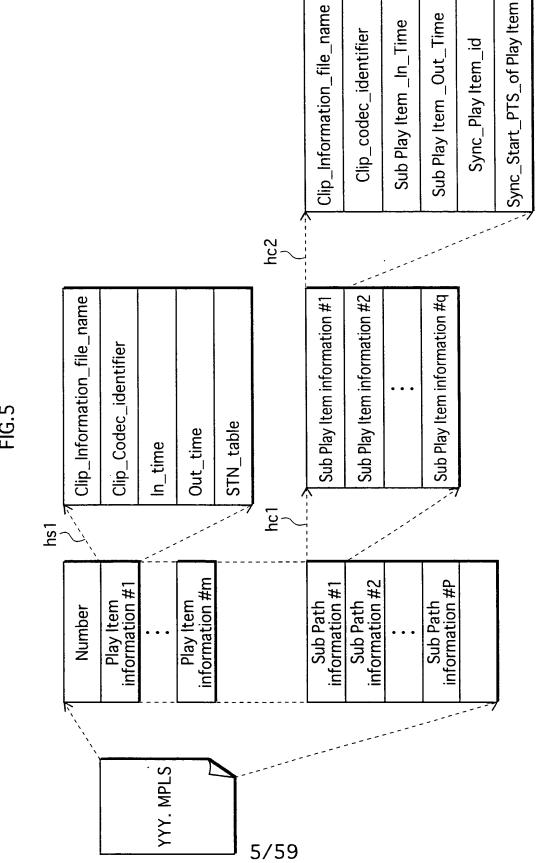


FIG.2







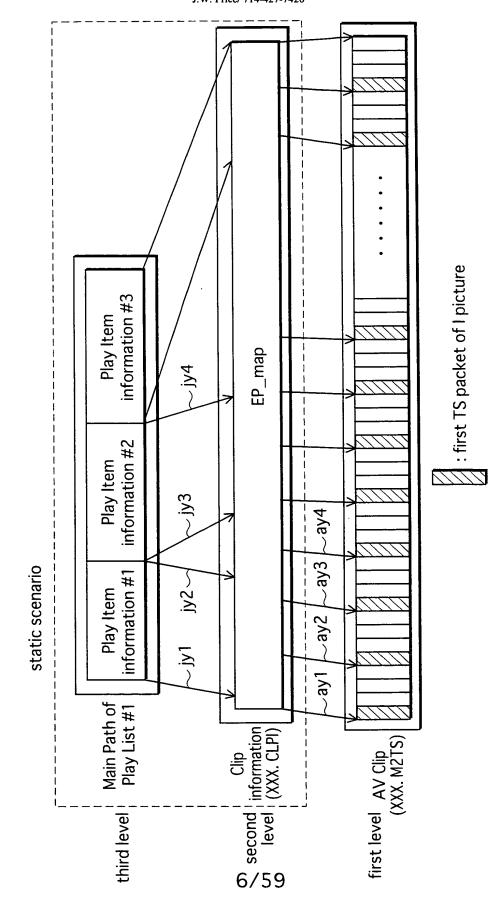
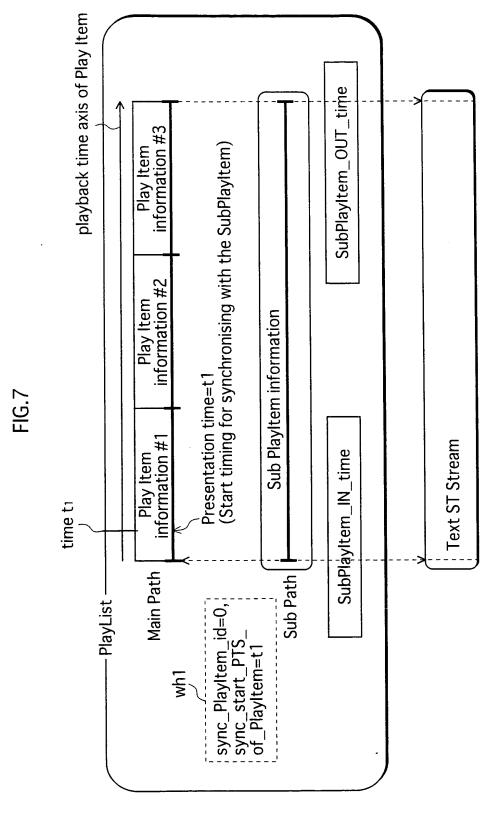


FIG.6



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FIG.8

STN_table number_of_video_stream_entries number_of_audio_stream_entries number_of_PG_textST_stream_entries number_of_IG_stream_entries video_stream entry-attribute entry-attribute entry-attribute entry-attribute audio_stream entry-attribute entry-attribute entry-attribute entry-attribute entry-attribute PG_TextST_stream < entry-attribute entry-attribute entry-attribute IG_stream entry-attribute

FIG.9A entry-attribute of video_stream

entry		ref_to_stream_PID_of_mainClip
attribute		stream_coding_type=0x02
	, ? /	frame_rate

FIG.9B entry-attribute of audio_stream

1						
	ref_to_stream_PID_of_mainClip	stream_coding_type=0x80(LPCM)	0x81(AC-3)	0x82(DTS)	audio_presentation_type(surround)	audio_language_code
/				, , , ·		
	entry	attribute			9/	59

FIG.9C entry-attribute of PG stream

1			
	ref_to_stream_PID_of_mainClip	stream_coding_type=0x90(=PG)	PG_language_code
7			
	entry	attribute	

FIG.9E entry-attribute of IG_stream

ref_to_stream_PID_of_mainClip	stream_coding_type=0x91(=IG)	IG_language_code
		1
entry	attribute	

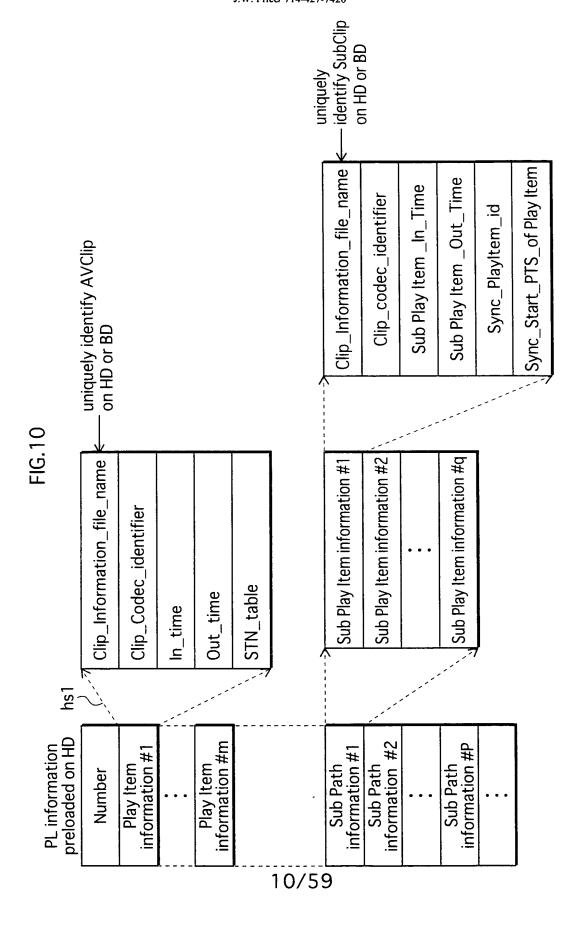
FIG.9D

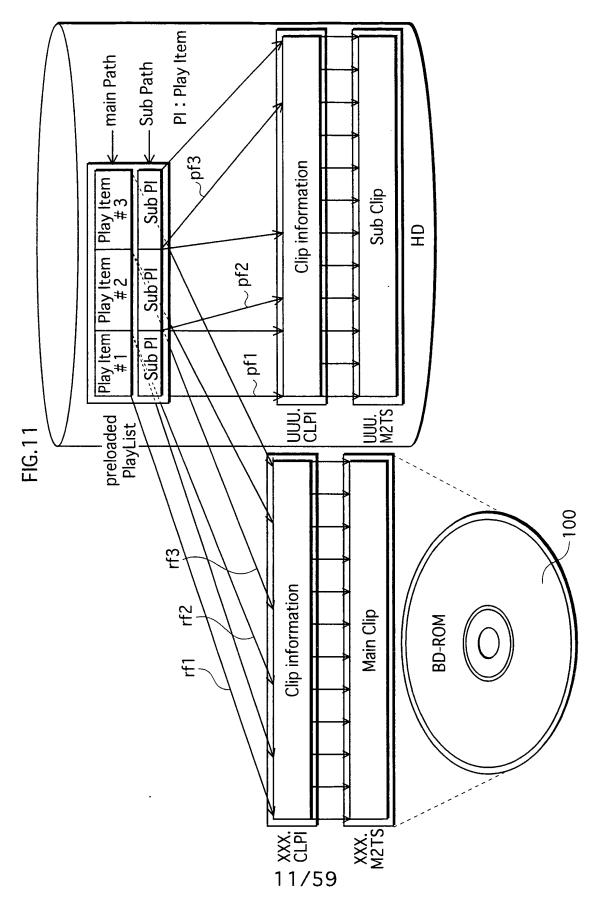
ref_to_subClip_entry_ID
ref_to_subpath_ID
ref_to_stream_PID_of_subClip
attribute

stream_coding_type=0x92(=Text)
character_code
textST_language_code

entry-attribute of text ST stream

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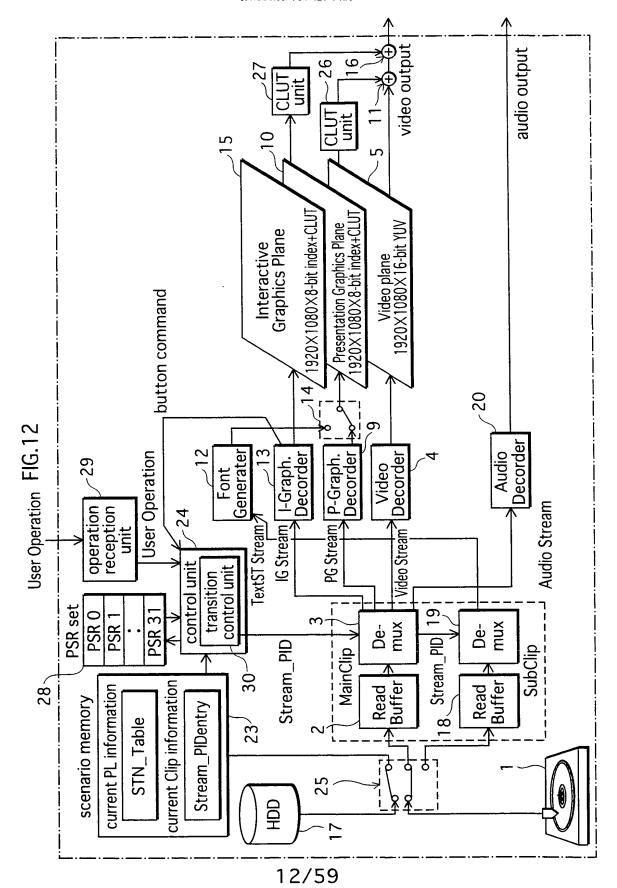


FIG.13	Audio stream number ••• 1 to 32 : Audio stream number	over a square selected or no Audio stream	disp_flag 0b : Display of Presentation Graphics and Text	subtitle is disabled 1b : Display of Presentation Graphics and Text subtitle is enabled	•	and Text Subtitle Stream T to 255 : Presentation Graphics Stream and Text sumber Stream and Text subtitle Stream number	OXFFFF	Subutitie Stiedin is for Science	Presentation Graphics stream and no	ובער אתאנונים און במוון		LPCM capability ··· 000 lb : Stereo capable 0010b : Surround capable		AC-3 capability · · · · OUU16: Stereo capable O010b: Surround capable	DTS capability 0000b : Incapable	0001b: Stereo capable	OUTOB: Surround capable	Language Code		Text subtitle 000000000000000000000000000000000	capability I UUUUUUUUUUUUUUUUUU : I ext subtitie capable Player
		Interactive Graphics	Audio	Presentation graphics and Text subtitle	Angle	Title	Chapter	PlayList			Video Configuration	Audio Configuration	Audio Language	Presentation Graphics and Text	subtitle Language	Menu Language	-		•	Text Capability	Player Version
		PSR 0	PSR 1	PSR 2	PSR 3	PSR 4	PSR 5	PSR 6	\mathbb{I}		PSR 14	PSR 15	PSR 16	PSR 17		PSR 18	PSR 19		PSR 29	PSR 30	PSR 31

PSR 0	Interactive Graphics	
PSR 1	Audio	
PSR 2	Presentation graphics and Text subtitle	0: Top Menu
PSR 3	Angle	ו גם וסס יונופ וומווספו
PSR 4	Title	1 to 999: Chapter number
PSR 5	Chapter	OXFFFF: Chapter number is mivalid
PSR 6	PlayList	0 to 999 : PlayList id
PSR 7	PlayItem	0 to 255 : PlayItem id
PSR 8	Presentation Time	
PSR 9	Timer	U to UXFFFFFFF : Presentation lime
PSR 10	Selected Button	
PSR 11	Menu Page	
PSR 12	Selected Style	
PSR 13	Parental	

FIG. 15A

Status and Transition for PSR1

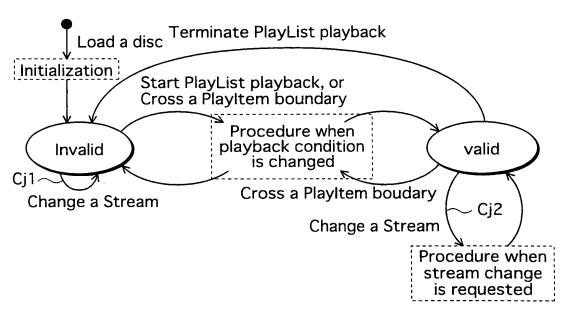


FIG.15B Procedure when playback condition is changed **S**1 number of YES entries in STN_table · S3 = 0?maintain PSR1 NO **S2** number of entries YES in STN_table ≥ PSR1 and condition (A) is condition (A): ₂S4 true? playback apparatus maintain PSR1 is capable of playing NO **S**5 Audio Stream specified by PSR1, set PSR1 judged by comparing PSR15 and stream_ D) coding_type of **END** Audio Stream

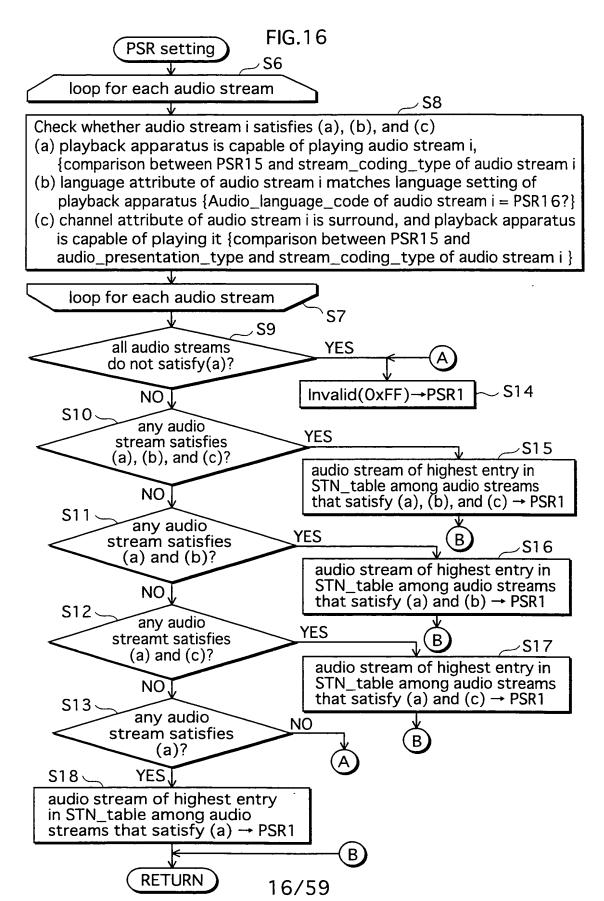


FIG. 17

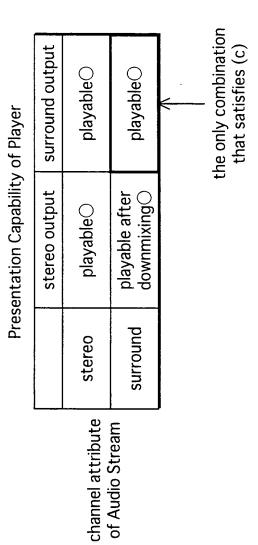
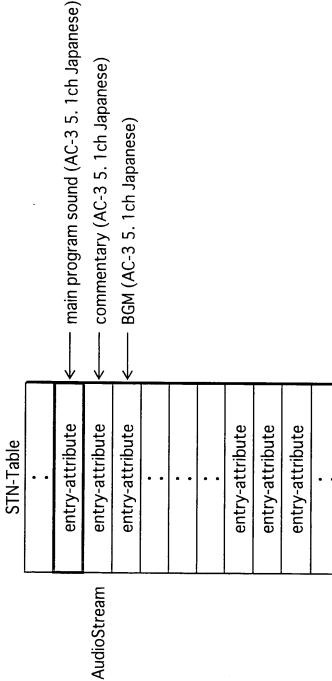


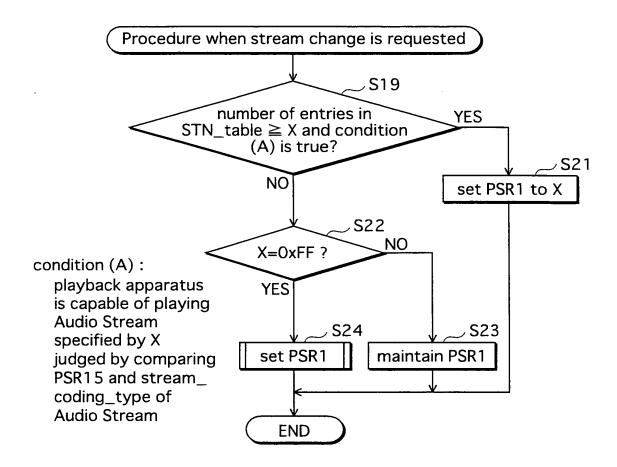
FIG.18

when there are a plurality of streams having same codec, channel, and language attribute



select audio stream of highest entry in STN-Table

FIG.19



								Priority	4	3	1	2	-	
								Check surround Capability(c)	×	0	1	×	0	l
O DTS X Inese	English	English	English	Japanese	Japanese	Japanese		Check language (b)	×	×		0	0	
Presentation Capability(PSR 15) = LPCM \bigcirc AC-3 \bigcirc DTS \times Language Setting (PSR 16) = Japanese Surroud Capability(PSR 15) = capable	2ch	5.1ch	5.1ch	2ch J	5.1ch J	5.1ch J		Check Presentation capability(a)	0	0	×	0	0	×
ntation Capability(PSR 15) = LPCM () Language Setting (PSR 16) Surroud Capability(PSR 15) = capable	AC-3	AC-3	DTS	AC-3	AC-3	DTS		Language	English	English	English	Japanese	Japanese	Japanese
ation Capabilit Langu ırroud Capabil	Audio Stream 1	Audio Stream 2	Audio Stream 3	Audio Stream 4	Audio Stream 5	Audio Stream 6		Channel	2ch	5.1ch	5.1ch	2ch	5.1ch	5.1ch
Present	Audio	Audio	Audio	Audio	Audio	Audio		Codec	AC-3	AC-3	DTS	AC-3	AC-3	DTS
FIG.20A	FIG.20B						FIG.20C		Audio Stream 1	Audio Stream 2	Audio Stream 3	Audio Stream 4	Audio Stream 5	Audio Stream 6

											ل			
	Author prefers	original stereo playback to	nixed	3			Priority	2	2		1	-		aving ig d
	الم الم	original ster	downmixed	الم مالم			Check surround Capability(c)	×	×	1	×	×	***	Since there are two audio streams having same priority, Audio Stream 4 having higher entry in STN_Table is selected
-3 ○ DTS × apanese	English	English	English	Japanese	Japanese	Japanese	Check language (b)	×	×	_	0	0	1	ere are two au iority, Audio S ntry in STN_T
Presentation Capability(PSR 15) = LPCM O AC-3 O DTS X Language Setting (PSR 16) = Japanese Surroud Capability(PSR 15) = incapable	2ch	5.1ch	5.1ch	2ch	5.1ch	5.1ch	Check Presentation capability(a)	0	0	×	0	0	×	Since th same pr higher e
ntation Capability(PSR 15) Language Setting Surroud Capability(PSR 15)	AC-3	AC-3	DTS	AC-3	AC-3	DTS	Language	English	English	English	Japanese	Japanese	Japanese	
entation Capa Laı Surroud Cap	Audio Stream 1	Audio Stream 2	Audio Stream 3	Audio Stream 4	Audio Stream 5	Audio Stream 6	Channel	2ch	5.1ch	5.1ch	2ch	5.1ch	5.1ch	
	<u> </u>	An	Au	Au	Au	A	Codec	AC-3	AC-3	DTS	AC-3	AC-3	DTS	
. FIG.21A	FIG.21B					FIG.21C	<u> </u>	Audio Stream 1	Audio Stream 2	Audio Stream 3	Audio Stream 4	Audio Stream 5	Audio Stream 6	
							21/59							

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	efers	p 4	co :ereo					Priority	2	2	-	1	1	1	naving Ig
	ا Author prefers	downmixed	— playback to original stereo	J playback			Check	surround Capability(c)	×	×	1	×	×		Since there are two audio streams having same priority, Audio Stream 5 having higher entry in STN_Table is selected
$\overline{}$	-	Γ	ĺ	 				ge Je							oibr NT
O DTS >	English	English	English	Japanese	Japanese	Japanese	Check	language (b)	×	×	-	0	0		here are t priority, Au entry in S
Presentation Capability(PSR 15) = LPCM O AC-3 O DTS X Language Setting (PSR 16) = Japanese Surroud Capability(PSR 15) = incapable	5.1ch	2ch	5.1ch	5.1ch	2ch	5.1ch	Check	Presentation capability(a)	0	0	×	0	0	×	Since t same p higher
ty(PSR 15) = L lage Setting (F ity(PSR 15) =	AC-3	AC-3	DTS	AC-3	AC-3	DTS		Language	English	English	English	Japanese	Japanese	Japanese	
ntation Capability(PSR 15) Language Setting Surroud Capability(PSR 15)	Audio Stream 2	Audio Stream 1	Audio Stream 3	Audio Stream 5	Stream 4	Audio Stream 6		Channel	5.1ch	2ch	5.1ch	5.1ch	2ch	5.1ch	
<u> </u>	Audio	Audio	Audio	Audio	Audio	Audio		Codec	AC-3	AC-3	DTS	AC-3	AC-3	DTS	
FIG.22A	FIG.22B					FIG.22C	22/	59	Audio Stream 2	Audio Stream 1	Audio Stream 3	Audio Stream 5	Audio Stream 4	Audio Stream 6	

FIG.23A Status and Transition for PSR2

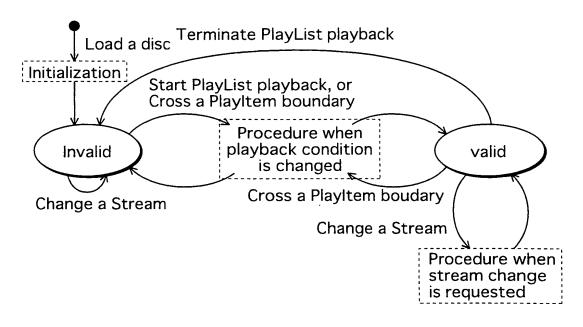


FIG.23B

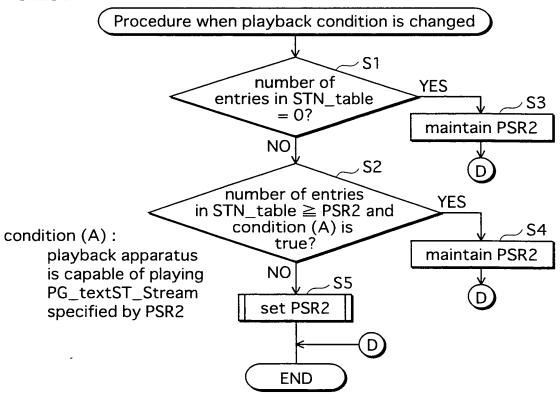
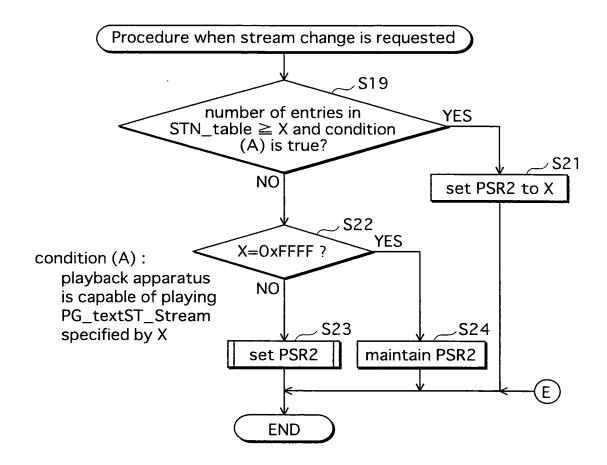


FIG.24



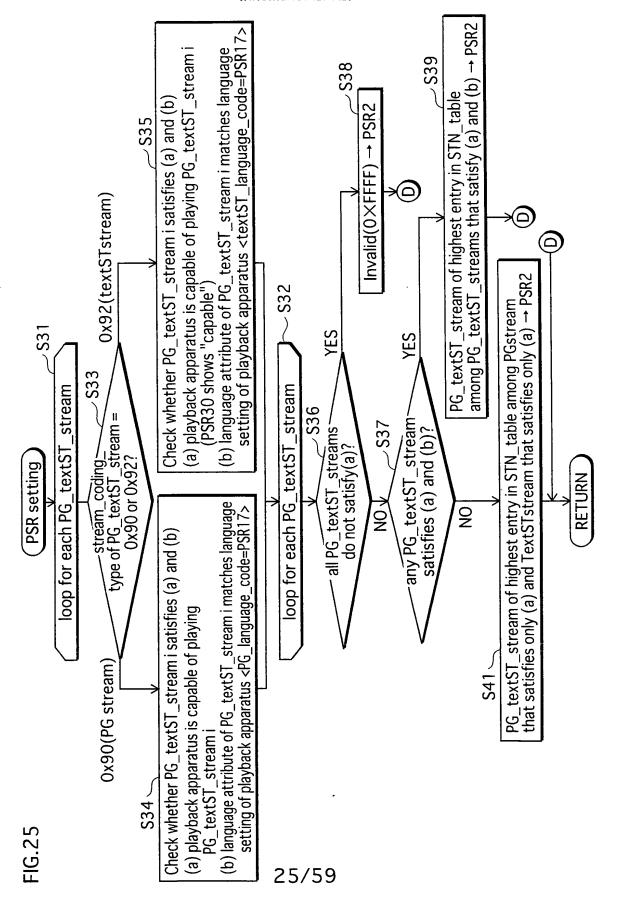


FIG.26A

Presentation Capability(PSR 15) = PGstream \bigcirc TextSTStream \times Language Setting (PSR 16) = Japanese

FIG.26B

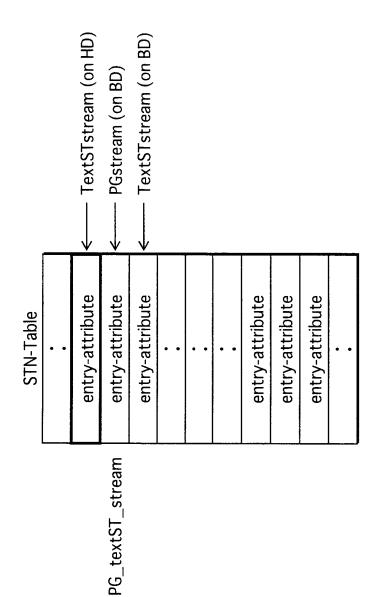
PG_TextST_stream1TextSTstreamEnglishPG_TextST_stream2PGstreamEnglishPG_TextST_stream3TextSTstreamJapanesePG_TextST_stream4PGstreamJapanese

FIG.26C

	Coding_Type	Language	Check Presentation capability(a)	Check language (b)	Priority
PG_TextST_stream1	TextSTstream	English	×	1	
PG_TextST_stream2	PGstream	English	0	×	2
PG_TextST_stream3	TextSTstream	Japanese	×		1
PG_TextST_stream4	PGstream	Japanese	0	0	1

FIG.27

when there are a plurality of PG_textST_streams that satisfy(a) and (b)



select PG_textST_stream having highest entry in STN_Table

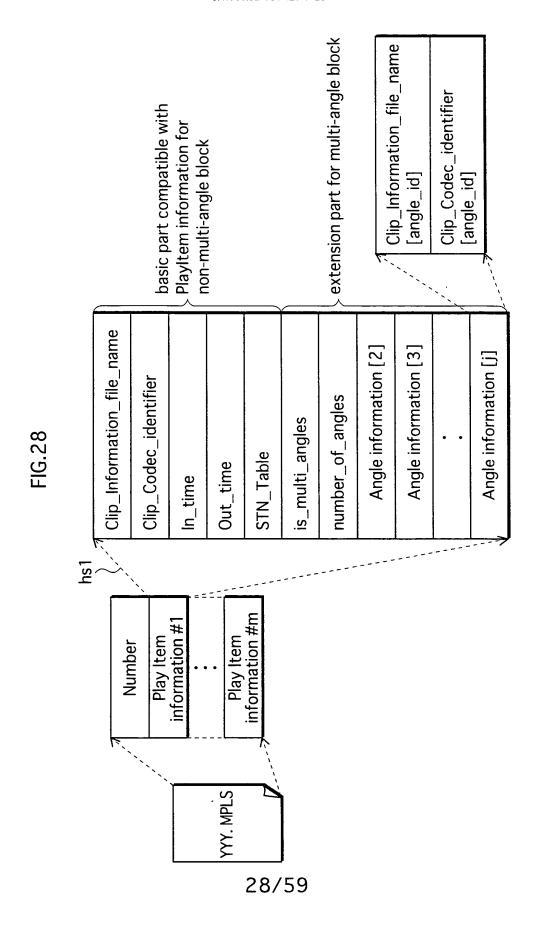
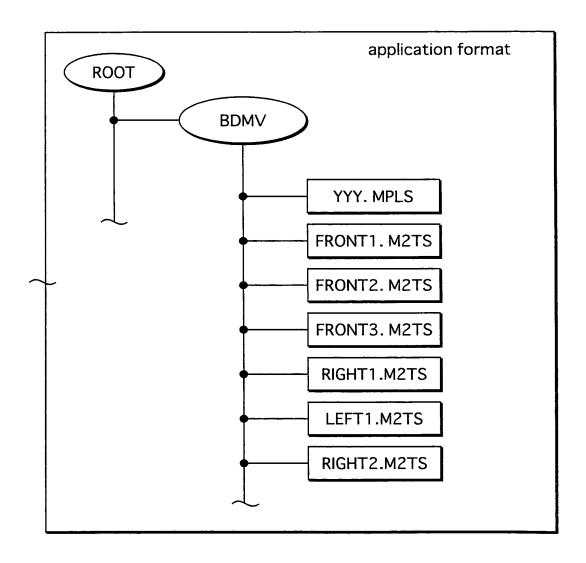


FIG.29



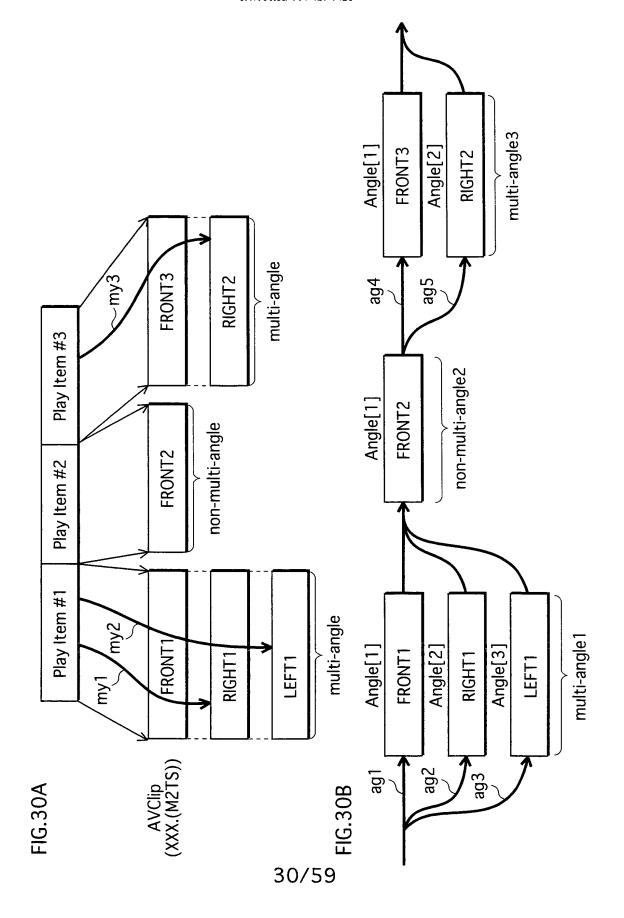
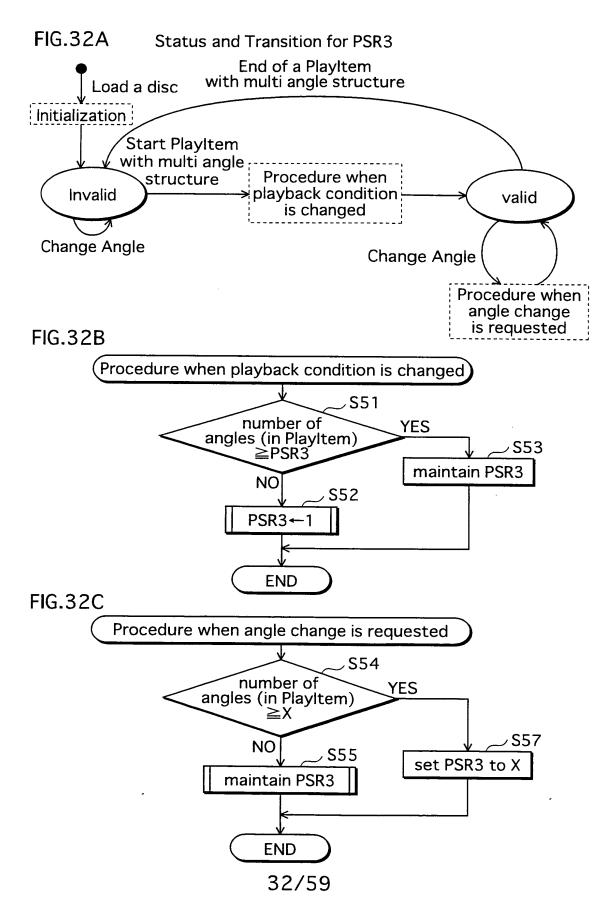
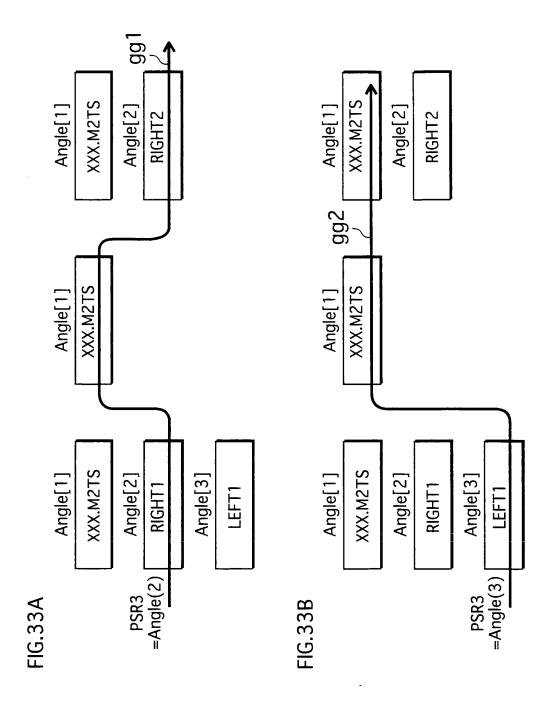


FIG.31

		1 to 9 : Angle number											
Interactive Graphics	Audio	Presentation graphics and Text subtitle	Angle	Title	Chapter	PlayList	Playitem	Presentation Time	Timer	Selected Button	Menu Page	Selected Style	Parental
PSR 0	PSR 1	PSR 2	PSR 3	PSR 4	PSR 5	PSR 6	PSR 7	PSR 8	PSR 9	PSR 10	PSR 11	PSR 12	PSR 13





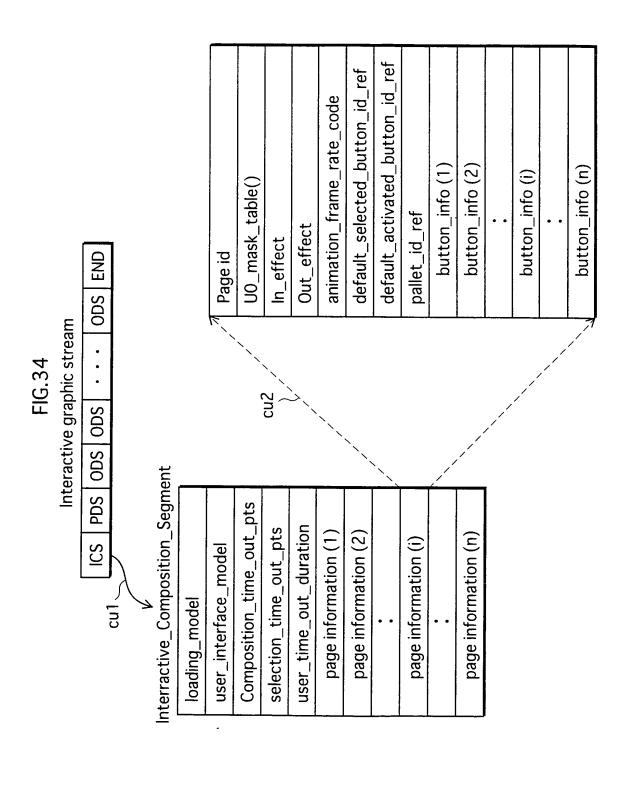
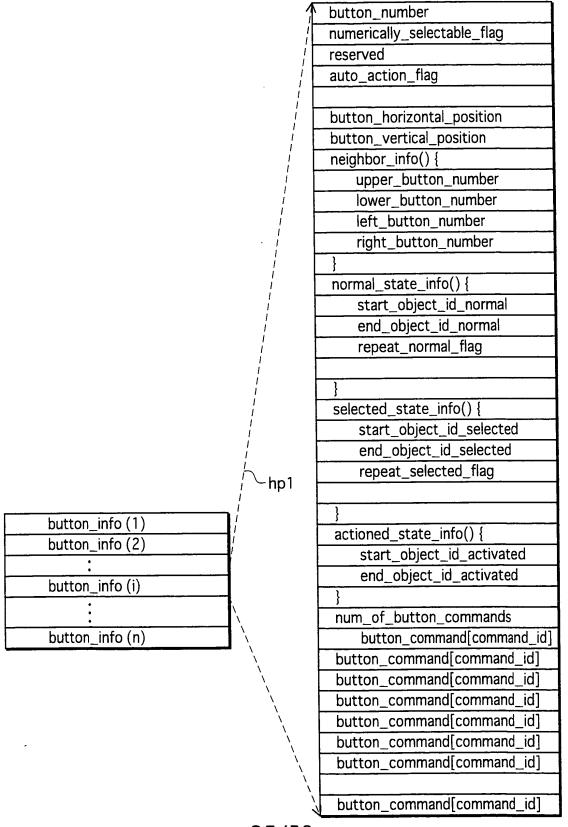
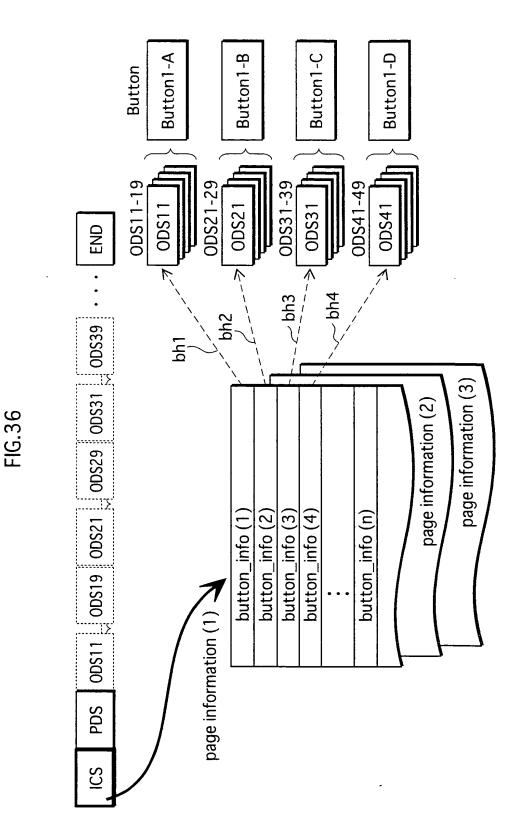
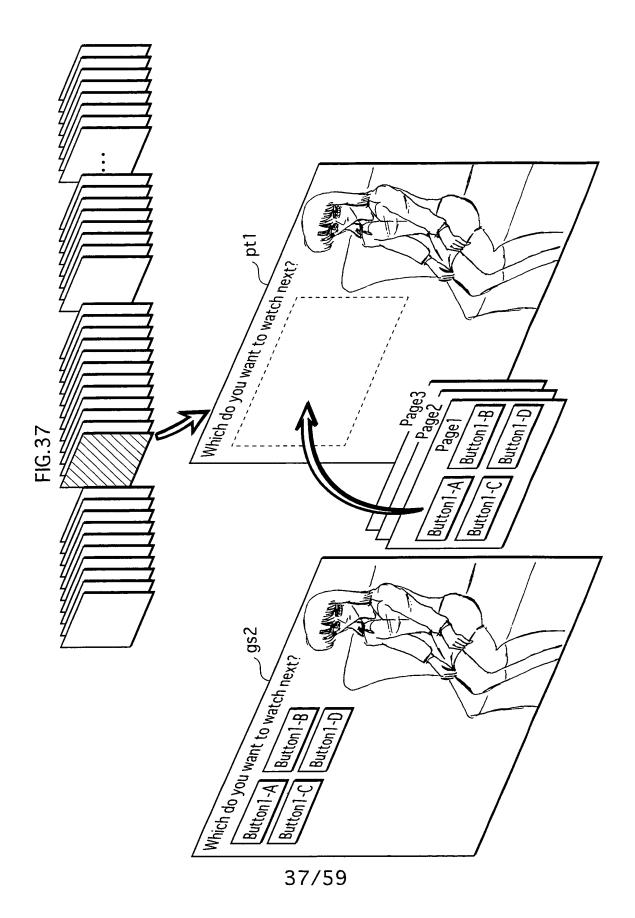


FIG.35





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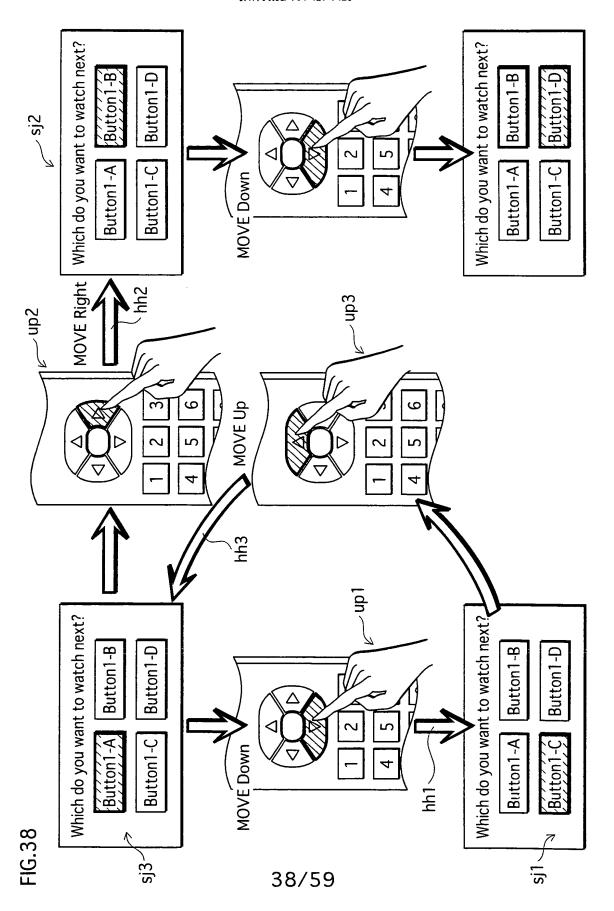
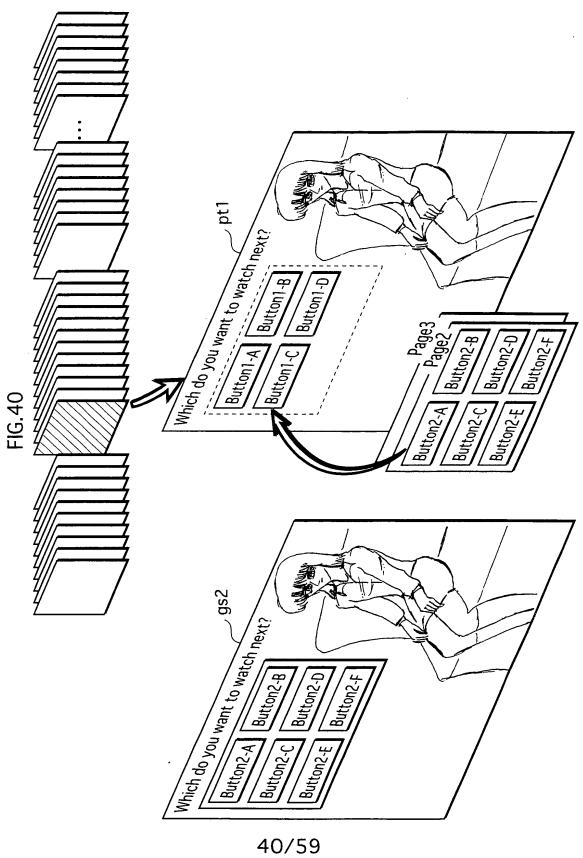


FIG.39

		_
•	neighbor_info()	
	upper_button_number	· · · Button1-A
i	lower_button_number	· · · Button1-C
	left_button_number	· · · Button1-A
,	right_button_number	· · · Button1-B
!	normal_state_info()	
	start_object_id_normal	··· ODS11
	end_object_id_normal	· · · ODS13
	repeat_normal_flag	
·	selected_state_info()	·
	start_object_id_selected	··· ODS14
	end_object_id_selected	··· ODS16
	repeat_selected_flag	•
1	actioned_state_info()	1
	start_object_id_activated	··· ODS17
!	end_object_id_activated	··· ODS19
	button_command	· · · setpage2
page information(1)	1	
button_info (1)	'/ neighbor_info()	
button_info (2)	upper_button_number	· · · Button1-A
button_info (3)		Button1-A Button1-C
	upper_button_number	
button_info (3)	upper_button_number lower_button_number	Button1-C
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number	Button1-C Button1-C
button_info (3)	upper_button_number lower_button_number left_button_number right_button_number	Button1-C Button1-C
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info()	Button1-C Button1-C Button1-D
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal	Button1-C Button1-C Button1-D ODS31
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal	Button1-C Button1-C Button1-D ODS31
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag	Button1-C Button1-C Button1-D ODS31
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag selected_state_info()	Button1-C Button1-C Button1-D ODS31 ODS33
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag selected_state_info() start_object_id_selected	Button1-C Button1-C Button1-D ODS31 ODS33 ODS34
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag selected_state_info() start_object_id_selected end_object_id_selected	Button1-C Button1-C Button1-D ODS31 ODS33 ODS34
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag selected_state_info() start_object_id_selected end_object_id_selected repeat_selected_flag	Button1-C Button1-C Button1-D ODS31 ODS33 ODS34
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag selected_state_info() start_object_id_selected end_object_id_selected repeat_selected_flag actioned_state_info()	Button1-C Button1-C Button1-D ODS31 ODS33 ODS34 ODS36
button_info (3) button_info (4)	upper_button_number lower_button_number left_button_number right_button_number normal_state_info() start_object_id_normal end_object_id_normal repeat_normal_flag selected_state_info() start_object_id_selected end_object_id_selected repeat_selected_flag actioned_state_info() start_object_id_activated	Button1-C Button1-C Button1-D ODS31 ODS33 ODS34 ODS36 ODS37



1to32: Interactive Graphics Stream number 0x0000 to 0x0FEF: Selected Button id OxFFFF: Button id is invalid 0x00 to 0xFE: Page id FIG.41 Presentation graphics and Text Interactive Graphics Presentation Time Selected Button Selected Style Menu Page Chapter **PlayItem** subtitle Parental **PlayList** Angle Audio Timer Title PSR 10 PSR 12 PSR 13 PSR₀ PSR 2 PSR 3 PSR 4 PSR 5 PSR 6 PSR 8 PSR 9 PSR 11 PSR 7 PSR 1

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FIG.42A Status and Transition for PSRO

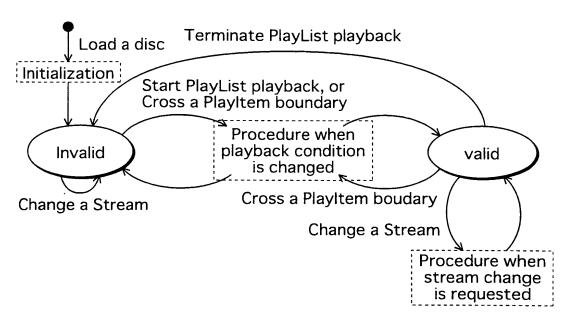


FIG.42B

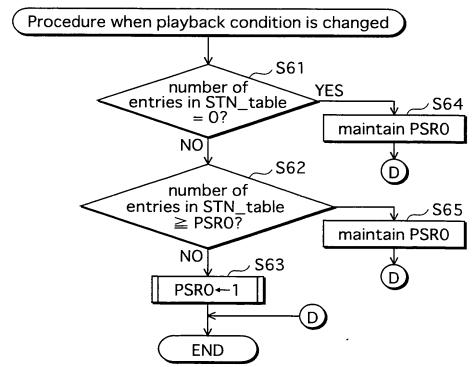
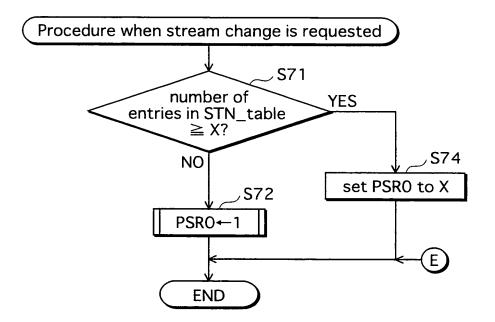


FIG.43



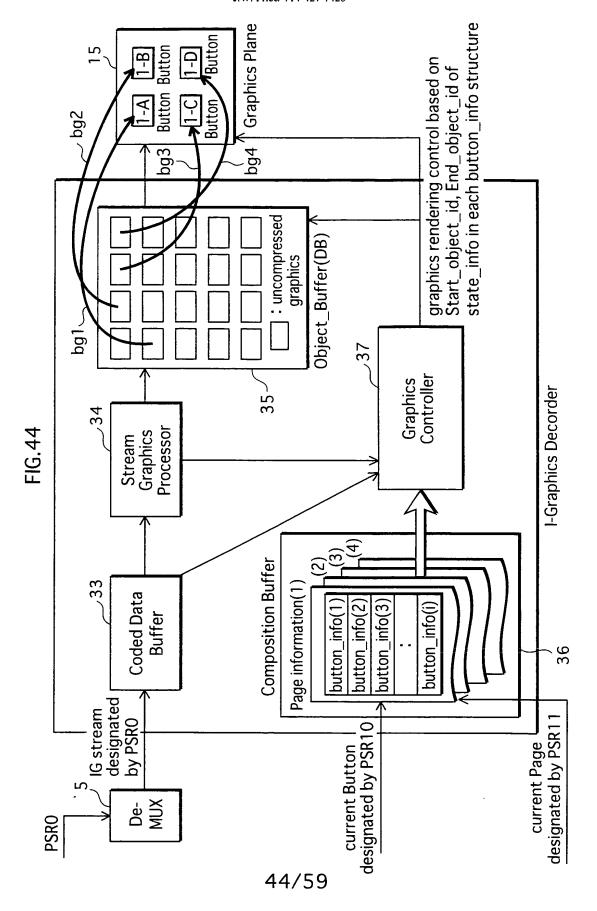


FIG.45

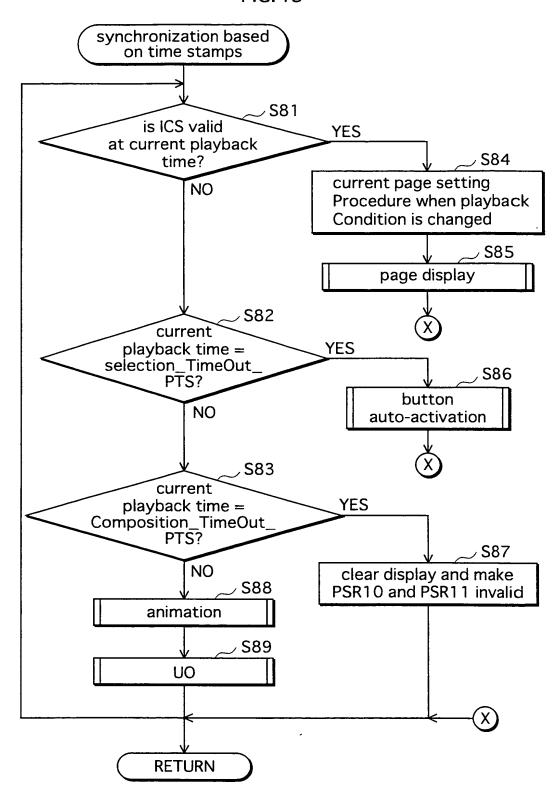


FIG.46

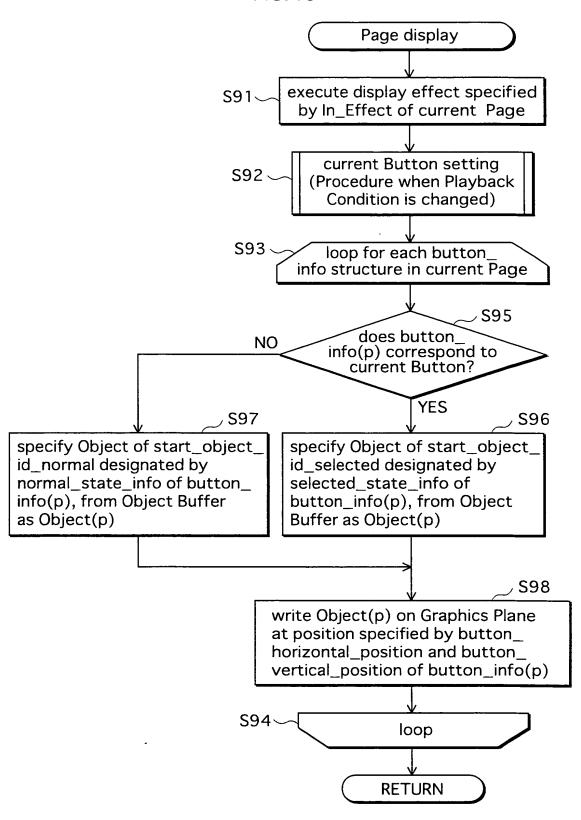
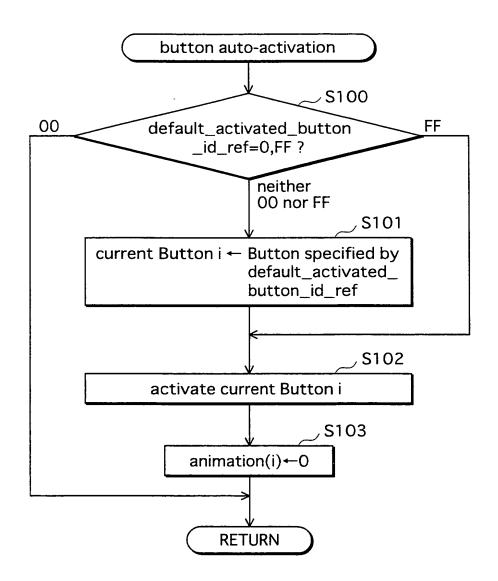


FIG.47



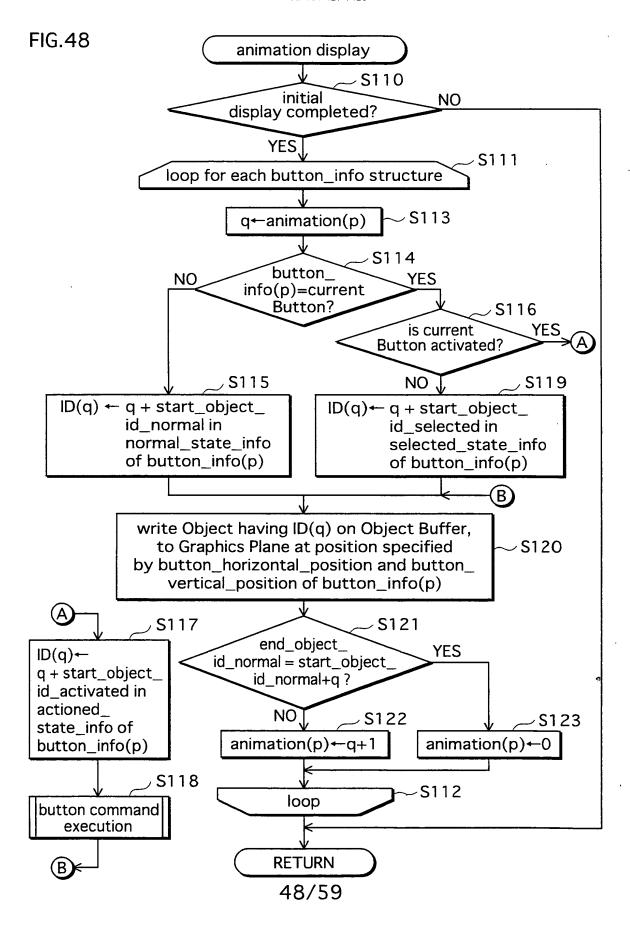
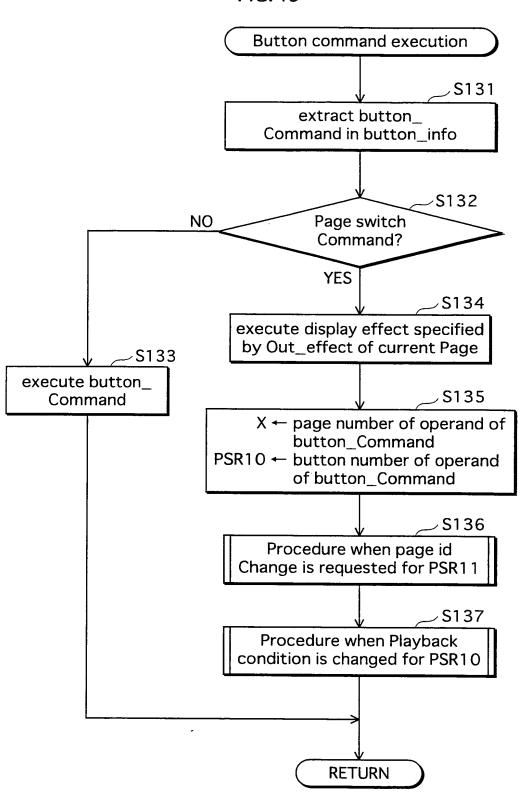


FIG.49



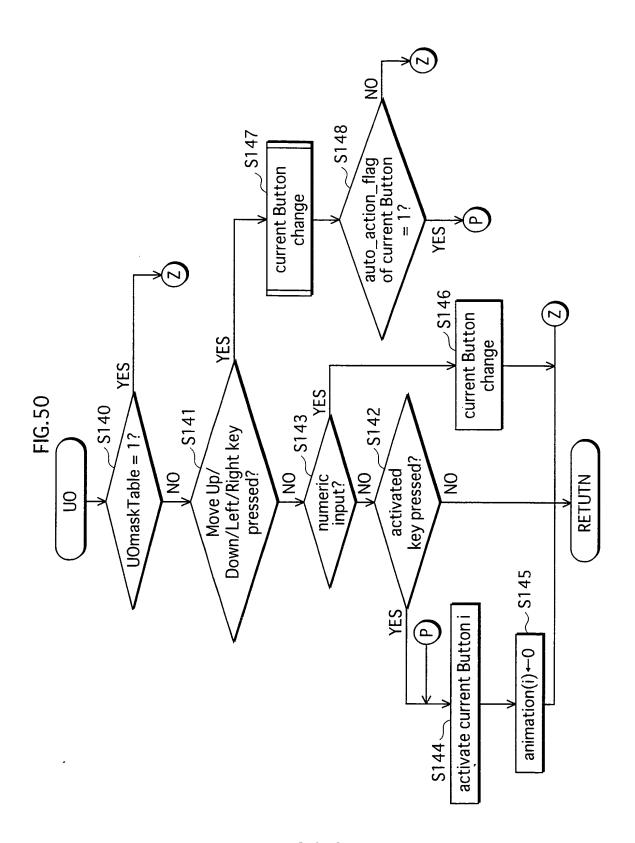
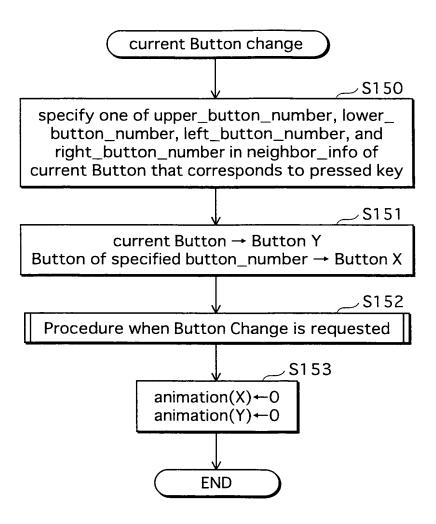
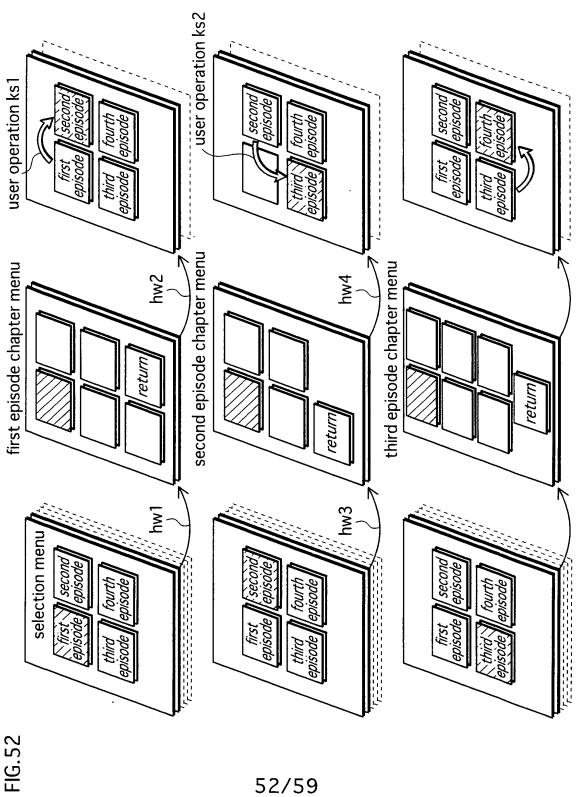


FIG. 51





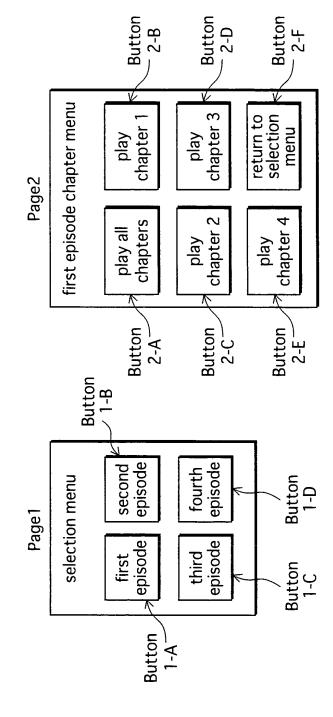
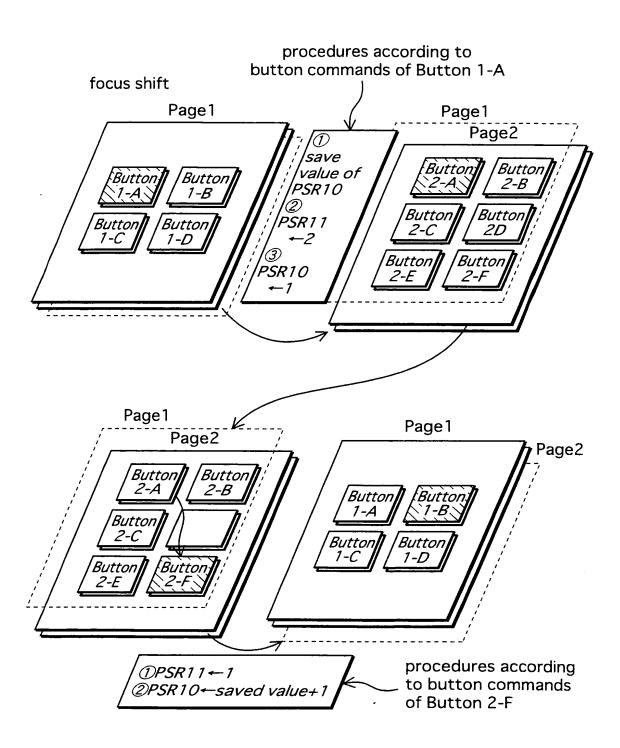


FIG.53

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FIG.54



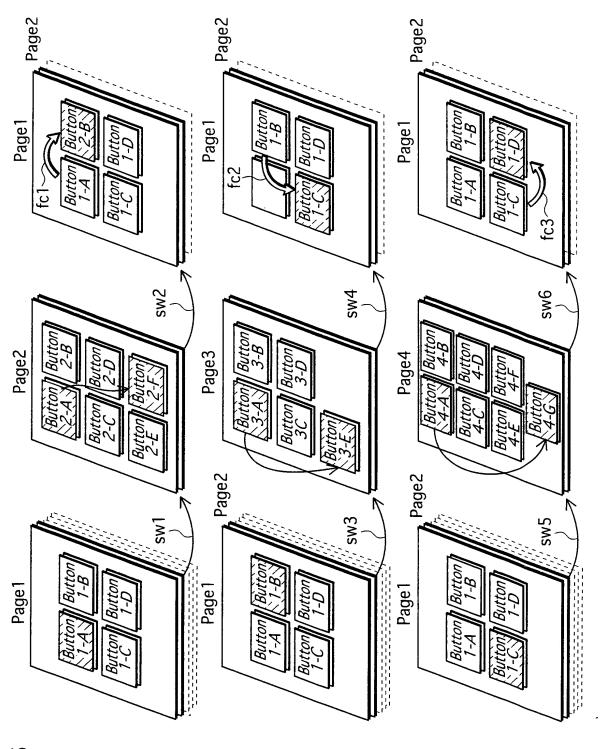


FIG.55

FIG.56

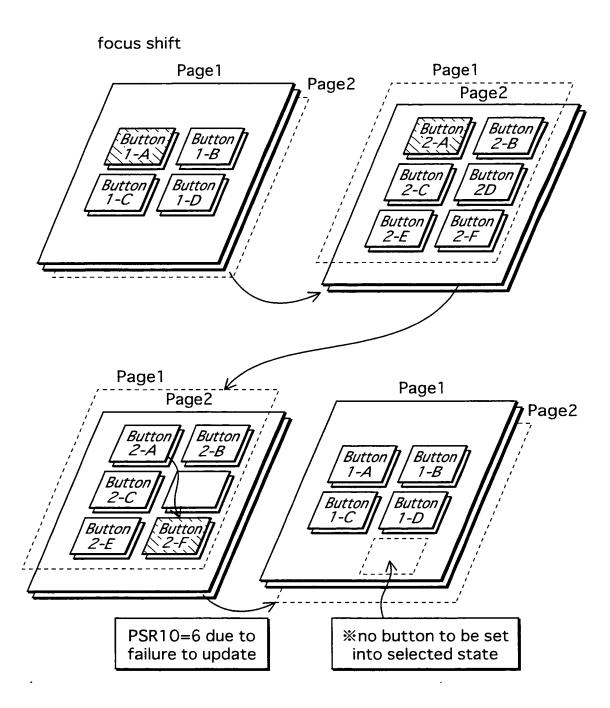


FIG.57A

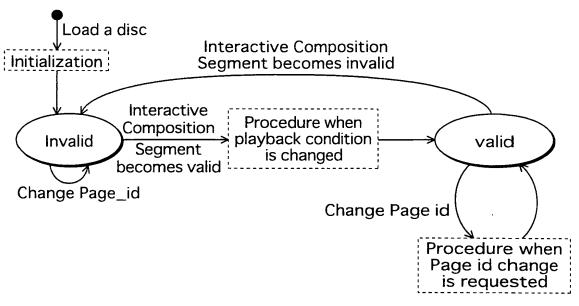


FIG.57B

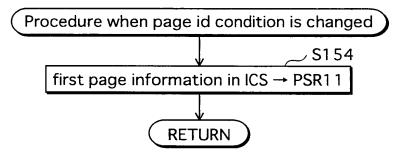


FIG.57C

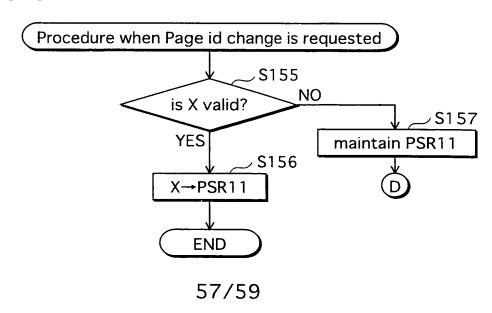


FIG.58A

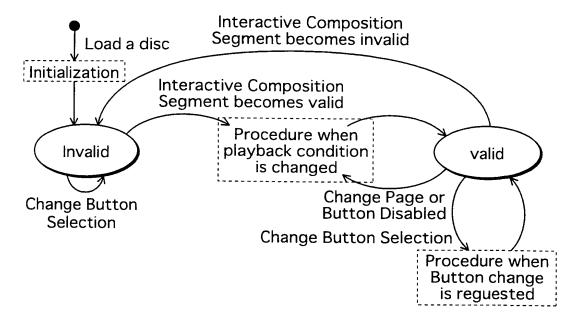
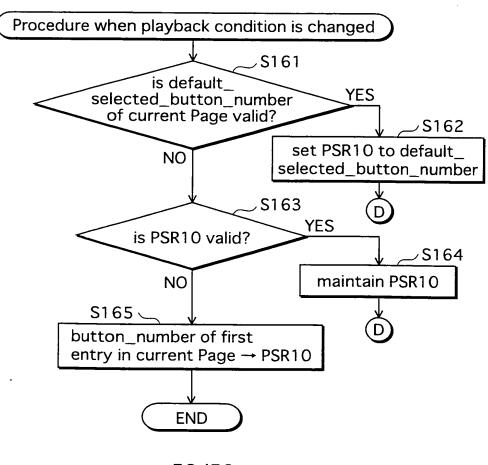


FIG.58B



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FIG.59

